

## C L A I M S

1. A method for operating a speech recognition system, in which a program-controlled recognizer (1) performs the steps of:  
dissecting a speech signal into frames and computing any kind of feature vector for each frame,  
labelling frames by characters or groups of them  
yielding a plurality of labels per phoneme,  
decoding said labels according a predetermined acoustic model to construct one or more words or fragments of a word,  
in which method a plurality of recognizers are accessible to be activated for speech recognition, and are combined in order to balance the results of speech recognition done by a single recognizer, **characterized by the steps of:**
  - a) collecting (210, 220, 230, 240) selection base data characterizing speech recognition boundary conditions with sensor means (5),
  - b) using (260) program-controlled arbiter means (6) for evaluating the collected data
  - c) selecting (290) the best suited recognizer or a combination thereof out of the plurality of available recognizers according to said evaluation.
2. The method according to claim 1, in which said sensor means (5) is one or more of:  
a decision logic, including software program, physical sensors or a combination of them.
3. The method according to claim 1, further comprising the steps of:
  - a) processing (260) a physical sensor (5) output in a

decision logic implementing one or more of: statistical tests, decision trees, fuzzy membership functions,  
b) returning (270) from said process a confidence value to be used in the sensor select/ combine decision.

4. The method according to claim 1, in which selection base data which have led to a recognizer select decision, is stored in a database for a repeated fast access (250) thereof in order to obtain a fast selection of recognizers.
5. The method according to claim 1, further comprising the step of:  
selecting (290) the number and/or combination of recognizers dependent (280) of the current processor load.
6. The method according to claim 1, further comprising the step of:  
storing the mapping rule (7) how one acoustic model is transformed to another one, instead of storing a plurality of models themselves.
7. A computer system having means for performing the steps of a method according to one of the preceding claims 1 to 6.
8. A computer program for execution in a data processing system comprising computer program code portions for performing respective steps of the method according to anyone of the preceding claims 1 to 6,  
when said computer program code portions are executed on a computer.

9. A computer program product stored on a computer usable medium comprising computer readable program means for causing a computer to perform the method of anyone of the claims 1 to 6,  
when said computer program product is executed on a computer.